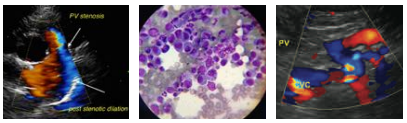
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE
7/5/22

PATIENT
Kona Lee

SPECIES
Canine

BREED
Chihuahua Mix

SEX
Neutered male

AGE
1/1/14

WEIGHT
21.1 lbs

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Animal Emergency Hospital

REFERRING VET
Dr. Thompson

INVOICE
31480

PRESENTING CLINICAL SIGNS

Friday; O gave a (larger than normal) purina chew. Ate dinner, but then vomited, parts of chew as well as white foam. Yesterday had normal defecation. but did not eat. Drank water Today did not eat, drank water, vomited Very lethargic at home, very abnormal, not wanting to walk around. No diarrhea Did get a squeaker out of a toy a few days ago, but unlikely to get into anything. No toxins in the house. 2 other dogs at home okay. Hx of anxiety, no medications or known medical conditions. Not up to date on preventatives Last ate Friday pm; vomiting per day ~4-5x. O also noted not lifting leg to urinate.
Current Medications: Metronidazole, Denamarin, Cerenia, Protonix, Buprenorphine, Vitamin B.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface. A Foley catheter is in place.

The prostate is normal for a neutered dog.

Left kidney is normal is size (4.97 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal is size (5.45 cm),shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

The adrenal gland is enlarged (2.75 cm long, 1.4 cm at the cranial pole and 1.25 cm at the caudal pole) with mild heterogenous parenchymal changes. Swollen capsular expansion is noted without evident capsular escape or vascular invasion.

Right adrenal gland is normal in size (2.04 cm long, 0.7 at cranial pole and 0.65 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). Two hypoechoic to anechoic nodules were noted. The one nodule measured 1.5 cm near the tail of the spleen and just <1.0 cm nodule is noted in the mid body that causes a capsular bulge. Splenic vasculature appears normal.

Liver
Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

GB is moderately distended with anechoic bile and gravity dependent echogenic sediment. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal
The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas
The observed pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and irregular in shape with a swollen undulating contour. Enhanced hyperechoic ill-defined surrounding fat is noted.

Free Abdomen
There is no evidence of peritoneal effusion or apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS
PRIMARY FINDINGS:

- **Moderate, acute pancreatitis.**
- **Gallbladder debris (canine) -** Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- **Left adrenal mass.**

SECONDARY FINDINGS:

- **Hypoechoic to anechoic splenic nodules.**
- **Urinary bladder debris.**

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further diagnostic recommendations for this patient include:

1. A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

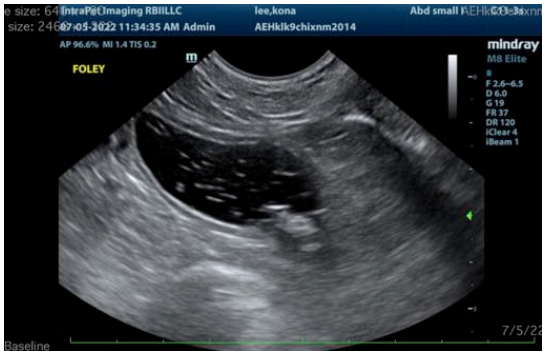
2. A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism based on this patient's reported mild hyperkalemia.

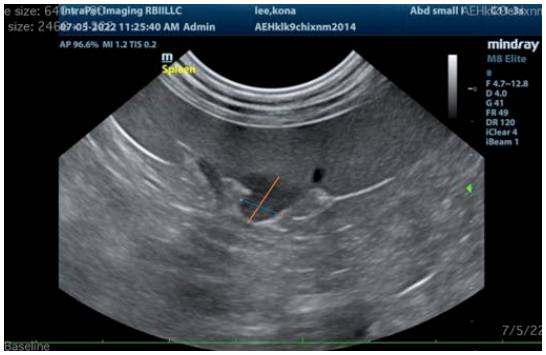
3. Testing for Leptospirosis can be considered if not recently evaluated as could FNA of the liver if the patient's coagulation status is appropriate.

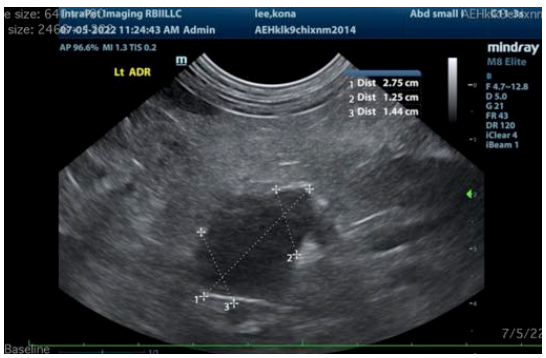
4. Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

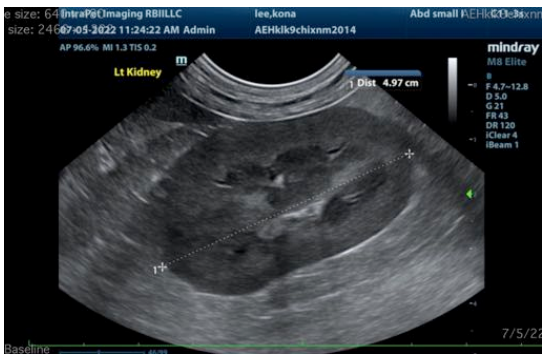
5. Medical management of pancreatitis with anti-emetics, gastroprotectants, appetite stimulants or nutritional support as needed, pain management, broad spectrum antibiotics, and fluid therapy is recommended. If possible, a fresh frozen plasma transfusion and hyperbaric oxygen therapy (HBOT) could be beneficial. Monitoring of the pancreas with power doppler is recommended to identify possible necrosis as well as other potential sequelae such as abscesses, etc.

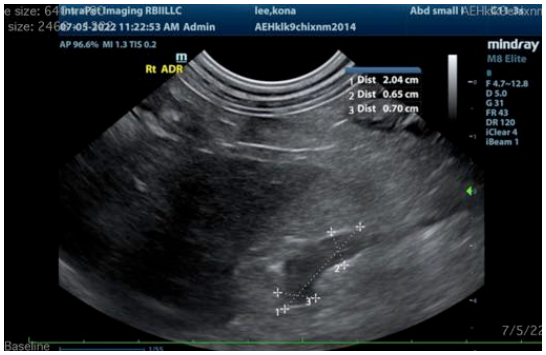
After this patient's acute pancreatitis/GI signs are managed and the patient is stable, if clinical signs such as hyperadrenocorticism such as PU/PD, panting, etc. are noted then testing for hyperadrenocorticism can be considered. However, with the lack of clinical signs I recommend monitoring of the adrenal mass is recommended with a recheck ultrasound in 6-8 weeks.

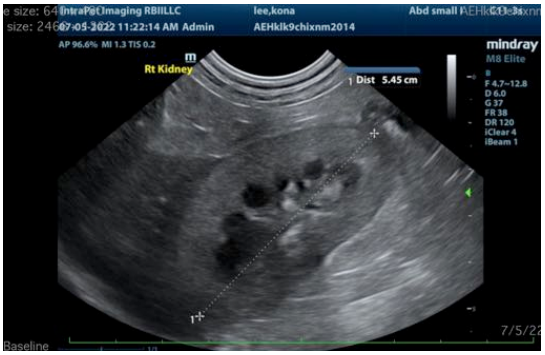


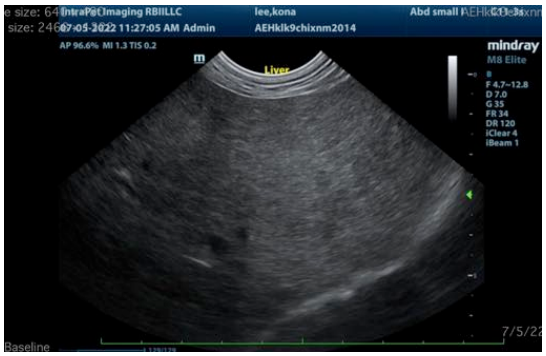


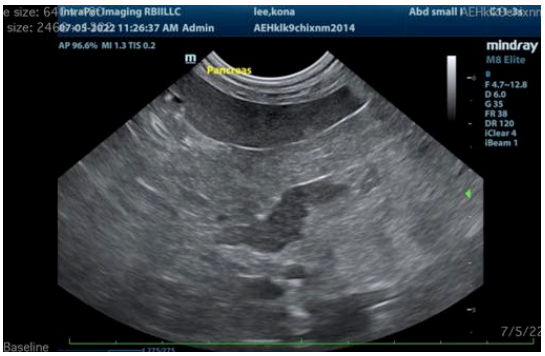


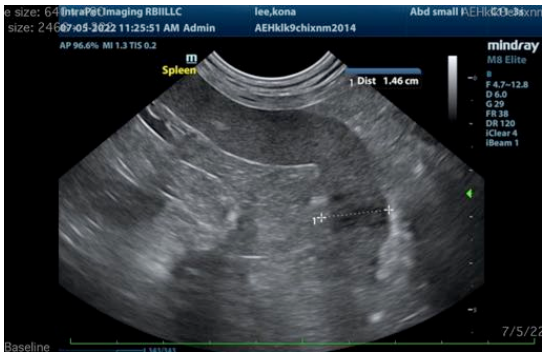


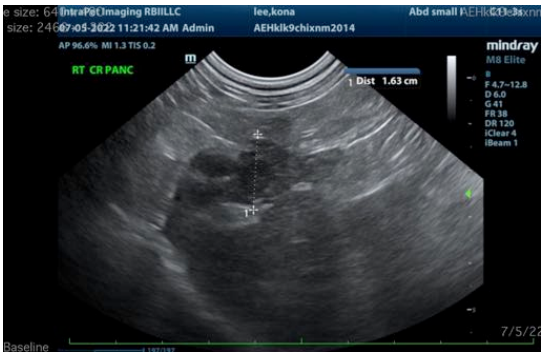

IntraPACImaging RBIILLC
lee,kona
Abd small
07-05-2022 11:22:53 AM Admin
AEHklk9chixnm2014
AP 96.6% MI 1.3 TIS 0.2
mindray
M8 Elite
Rt ADR
1 Dist 2.04 cm
2 Dist 0.65 cm
3 Dist 0.70 cm
7/5/22
Baseline

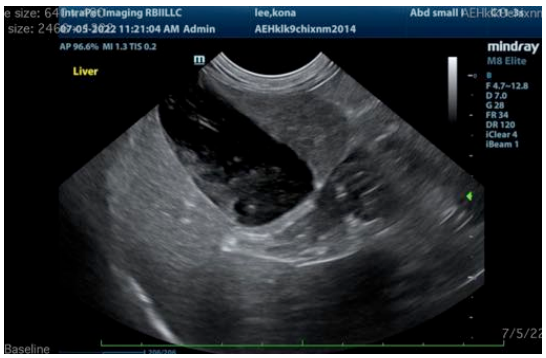

IntraPACImaging RBIILLC
lee,kona
Abd small
07-05-2022 11:22:14 AM Admin
AEHklk9chixnm2014
AP 96.6% MI 1.3 TIS 0.2
mindray
M8 Elite
Rt Kidney
1 Dist 5.45 cm
7/5/22
Baseline

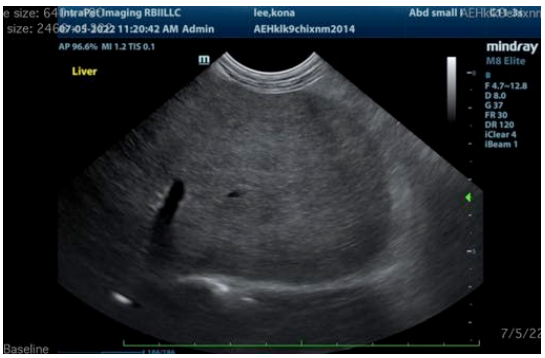

IntraPACImaging RBIILLC
lee,kona
Abd small
07-05-2022 11:27:05 AM Admin
AEHklk9chixnm2014
AP 96.6% MI 1.3 TIS 0.2
mindray
M8 Elite
Liver
7/5/22
Baseline


IntraPACImaging RBIILLC
lee,kona
Abd small
07-05-2022 11:26:37 AM Admin
AEHklk9chixnm2014
AP 96.6% MI 1.3 TIS 0.2
mindray
M8 Elite
Pancreas
7/5/22
Baseline


IntraPACImaging RBIILLC
lee,kona
Abd small
07-05-2022 11:25:51 AM Admin
AEHklk9chixnm2014
AP 96.6% MI 1.3 TIS 0.2
mindray
M8 Elite
Spleen
1 Dist 1.46 cm
7/5/22
Baseline


IntraPACImaging RBIILLC
lee,kona
Abd small
07-05-2022 11:21:42 AM Admin
AEHklk9chixnm2014
AP 96.6% MI 1.3 TIS 0.2
mindray
M8 Elite
RT CR PANC
1 Dist 1.63 cm
7/5/22
Baseline


IntraPACImaging RBIILLC
lee,kona
Abd small
07-05-2022 11:21:04 AM Admin
AEHklk9chixnm2014
AP 96.6% MI 1.3 TIS 0.2
mindray
M8 Elite
Liver
7/5/22
Baseline


IntraPACImaging RBIILLC
lee,kona
Abd small
07-05-2022 11:20:42 AM Admin
AEHklk9chixnm2014
AP 96.6% MI 1.2 TIS 0.1
mindray
M8 Elite
Liver
7/5/22
Baseline

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

Beth Johnson, DVM DACVIM

Beth.Johnson@SonoPath.com